

INDEX TO VOL. XCIII. (A)

Address of President, November 30, 1916, 90.
Affinity, problems bearing on residual (Pickering), 533.
Bousfield (W. R.) Note on the Specific Heat of Water, 587.
Brush (C. F.) and Hadfield (Sir R. A.) Spontaneous Generation of Heat in Recently Hardened Steel, 188.
Carlton-Sutton (T.) A Determination of the Heat of Vaporisation of Water at 100° C. and One Atmosphere Pressure in Terms of the Mean Calorie, 155.
Chapman (S.) The Kinetic Theory of Simple and Composite Monatomic Gases: Viscosity, Thermal Conduction, and Diffusion, 1.
Chree (C.) The Magnetic Storm of August 22, 1916, 177.
Copper ferrocyanide membrane, selective properties of (Tinker), 268.
Dalby (W. E.) A Graphical Method of Drawing Trajectories for High-Angle Fire, 333.
Earth, gravitational instability and figure of (Jeans), 413.
Electrified systems moving with high speed, effective inertia of (Walker), 448.
Esson (W.) Obituary notice of, liv.
Fluids, dynamics of revolving (Rayleigh), 148; — motion of solids in (Taylor), 99.
Fourier series, convergence of restricted (Young), 276; — mode of approach to zero of coefficients of (Young), 455; — order of magnitude of coefficients of (Young), 42.
Fowler (A.) and Strutt (R. J.) Absorption Bands of Atmospheric Ozone in the Spectra of Sun and Stars, 577.
Gases, kinetic theory of (Chapman), 1.
Gravitational instability and figure of earth (Jeans), 413.
Guest (J. J.) and Lea (F. C.) Torsional Hysteresis of Mild Steel, 313.
Hadfield (Sir R.) and Newbery (E.) The Corrosion and Electrical Properties of Steels, 56; — see also Brush and Hadfield.
Havelock (T. H.) The Initial Wave Resistance of a Moving Surface Pressure, 240; — Some Cases of Wave Motion due to a Submerged Obstacle, 520.
Heat of vaporisation of water (Carlton-Sutton), 155; — specific, of water (Bousfield), 587.
High-frequency resistance of multiply-stranded wire (Howe), 468.
Howe (G. W. O.) The High-Frequency Resistance of Multiply-Stranded Insulated Wire, 468.
Hudson (H. P.) See Ross and Hudson.
Jeans (J. H.) Gravitational Instability and the Figure of the Earth, 413.
Jets, experiments with mercury (Smith and Moss), 373.
Kaye (G. W. C.) The Composition of the X-Rays from Various Metals, 427.
Kinetic theory of monatomic gases (Chapman), 1.
Lamb (H.) On Waves in an Elastic Plate, 114; — On the Deflection of the Vertical by Tidal Loading of the Earth's Surface, 293.

Larmor (Sir Joseph) and Yamaga (N.) On Permanent Periodicity in Sunspots, 493.

Lea (F. C.) See Guest and Lea.

Light, reflection of, from regularly stratified medium (Rayleigh), 565.

Livens (G. H.) On the Mechanical Relations of the Energy of Magnetisation, 20.

Magnetic induction and its reversal in iron shells (Nicholson and Wilson), 129 ; —— inertia (Walker), 442.

Magnetisation, mechanical relations of energy of (Livens), 20.

Magnetism, residual, and magnetic shielding (Wilson and Nicholson), 393.

Meldola (R.) Obituary notice of, xxix.

Membrane, selective properties of the copper ferrocyanide (Tinker), 268.

Mercury jets, experiments with (Smith and Moss), 373.

Merton (T. R.) and Nicholson (J. W.) On Phenomena relating to the Spectra of Hydrogen and Helium, 27.

Moon's motion and dissipation of energy in tides (Street), 348.

Moss (H.) See Smith and Moss.

Multiple integrals (Young), 28.

Newbery (E.) See Hadfield and Newbery.

Nicholson (J. W.) The Lateral Vibrations of Bars of Variable Section, 506 ; —— see Merton and Nicholson ; —— and Wilson (E.) Magnetic Induction and its Reversal in Spherical Iron Shells, 129.

Nitrogen, spectroscopic observations on active modification of—V (Strutt), 254.

Obituary Notices of Fellows, &c., deceased :—

Roscoe, Sir H., i.	Stirling, Sir J., xli.
Moseley, H. G. J., xxii.	Ramsay, Sir W., xlii.
Meldola, R., xxix.	Esson, W., liv.
Williamson, B., xxxviii.	

Ozone absorption in sun and star spectra (Fowler and Strutt), 577.

Pathometry, theory of probabilities applied to study of (Ross and Hudson), 212, 225.

Photo-electric emission from alloy of sodium and potassium (Wilson), 359.

Pickering (S. U.) Problems bearing on Residual Affinity, 533.

Probabilities, application of theory of, to study of pathometry (Ross and Hudson), 212, 225.

Radioactive luminous compounds, theory of decay in (Walsh), 550.

Ramsay (Sir W.) Obituary notice of, xlii.

Rayleigh (Lord) On the Dynamics of Revolving Fluids, 148 ; —— On the Reflection of Light from a Regularly Stratified Medium, 565.

Ross (Sir R.) and Hudson (H. P.) An Application of the Theory of Probabilities to the Study of *a priori* Pathometry.—Part II, 212 ; Part III, 225.

Rutile and cassiterite, X-ray analysis of crystal structure of (Williams), 418.

Selenates of nickel group (Tutton), 68.

Smith (S. W. J.) and Moss (H.) Experiments with Mercury Jets, 373.

Spectra of hydrogen and helium (Merton and Nicholson), 27.

Spectra of sun and stars, bands of atmospheric ozone in (Fowler and Strutt), 577.

Steel, spontaneous generation of heat in recently hardened (Brush and Hadfield), 188 ; —— torsional hysteresis of mild (Guest and Lea), 313.

Steels, corrosion and electrical properties of (Hadfield and Newbery), 56.

Stirling (Sir J.) Obituary notice of, xli.

Street (R. O.) The Dissipation of Energy in the Tides in Connection with the Acceleration of the Moon's Mean Motion, 348.

Strutt (Hon. R. J.) Spectroscopic Observations on the Active Modification of Nitrogen.—V, 254 ; —— see also Fowler and Strutt.

Sulphates, X-ray analysis and topic axes of alkali, and bearing on theory of valency volumes (Tutton), 72.

Sunspots, permanent periodicity in (Larmor and Yamaga), 493.

Taylor (G. I.) Motion of Solids in Fluids when the Flow is not Irrotational, 99.

Thomson (Sir J. J.) Presidential Address, 1916, 90.

Tidal loading of earth's surface, deflection of vertical by (Lamb), 293.

Tides, dissipation of energy in, and acceleration of moon's motion (Street), 348.

Tinker (F.) The Selective Properties of the Copper Ferrocyanide Membrane, 268.

Trajectories for high-angle fire, graphical method for (Dalby), 333.

Tutton (A. E. H.) Monoclinic Double Selenates of the Nickel Group, 68 ; —— X-Ray Analysis and Topic Axes of the Alkali Sulphates and their Bearing on the Theory of Valency Volumes, 72.

Vibrations of bars of variable section (Nicholson), 506.

Walker (G. W.) On Magnetic Inertia, 442 ; —— The Effective Inertia of Electrified Systems Moving with High Speed, 448.

Walsh (J. W. T.) The Theory of Decay in Radioactive Luminous Compounds, 550.

Water, determination of heat of vaporisation of, in terms of mean calorie (Carlton-Sutton), 155 ; —— specific heat of (Bousfield), 587.

Wave motion due to submerged obstacle (Havelock), 520 ; —— resistance of moving surface pressure (Havelock), 240.

Waves in an elastic plate (Lamb), 114.

Williams (C. M.) X-Ray Analysis of the Crystal Structure of Rutile and Cassiterite, 418.

Williamson (B.) Obituary notice of, xxxviii.

Wilson (E.) See Nicholson and Wilson ; —— and Nicholson (J. W.) On Residual Magnetism in Relation to Magnetic Shielding, 393.

Wilson (W.) The Complete Photo-Electric Emission from the Alloy of Sodium and Potassium, 359.

X-ray analysis of crystal structure (Williams), 418.

X-rays from various metals, composition of (Kaye), 427.

Yamaga (N.) See Larmor and Yamaga.

Young (W. H.) On Multiple Integrals, 28 ; —— On the Order of Magnitude of the Coefficients of a Fourier Series, 42 ; —— On the Ordinary Convergence of Restricted Fourier Series, 276 ; —— On the Mode of Approach to Zero of the Coefficients of a Fourier Series, 455.

END OF THE NINETY-THIRD VOLUME (SERIES A).